

In the Claims:

1. (Currently Amended) An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

(a) a polynucleotide encoding the amino acids from ~~about 1 to about 373~~ of SEQ ID NO:2;

(b) a polynucleotide encoding the amino acids from ~~about 2 to about 373~~ of SEQ ID NO:2;

(c) a polynucleotide encoding the amino acids from ~~about 1 to about 197~~ and about 236 to about 373 of SEQ ID NO:2, wherein said amino acids about 197 and about 236 are joined by a peptide bond;

(d) a polynucleotide encoding the amino acids from ~~about 1 to about 288~~ and about 336 to about 373 of SEQ ID NO:2, wherein amino acids about 288 and about 336 are joined by a peptide bond;

(e) a polynucleotide encoding the amino acids from ~~about 1 to about 197~~, amino acids about 236 to about 288, and amino acids about 336 to about 373 of SEQ ID NO:2, wherein said amino acids about 197 and about 236 are joined by a peptide bond, and said amino acids about 288 and about 336 are joined by a peptide bond.

(f) a polynucleotide encoding the amino acids from ~~about 1 to about 187~~ of SEQ ID NO:2;

(g) a polynucleotide encoding the amino acids from ~~about 2 to about 187~~ of SEQ ID NO:2;

(h) a polynucleotide encoding the amino acids from ~~about 1 to about 198~~ of SEQ ID NO:2;

(i) the polynucleotide deposited as ATCC Accession No. PTA 89; and

~~(j) a polynucleotide at least 80% identical to any one of the polynucleotides of (a)-(i);~~

(kj) the polynucleotide complement of the polynucleotide of any one of the polynucleotides of (a)-(i).

(k) a polynucleotide at least 80% identical to any one of the polynucleotides of (a)-(j), wherein said polynucleotide encodes a polypeptide recognized by an antibody raised against Nogo B protein.

2. (Currently Amended) An isolated nucleic acid molecule comprising at least 700 contiguous nucleotides from the coding region of SEQ ID NO:1, wherein said coding region encodes SEQ ID NO:2.

Claims 3-4 (Cancelled)

5. (Currently Amended) An isolated nucleic acid molecule comprising a polynucleotide encoding a polypeptide wherein, except for at least one conservative amino acid substitution, said polypeptide has an amino acid sequence selected from the group consisting of:

- (a) amino acids from ~~about~~ 1 to ~~about~~ 373 of SEQ ID NO:2;
- (b) amino acids from ~~about~~ 2 to ~~about~~ 373 of SEQ ID NO:2;
- (c) amino acids from ~~about~~ 1 to about 197 and about 236 to about 373 of SEQ ID NO:2, wherein said amino acids about 197 and about 236 are joined by a peptide bond;
- (d) amino acids from ~~about~~ 1 to about 288 and about 336 to about 373 of SEQ ID NO:2, wherein said amino acids about 288 and about 336 are joined by a peptide bond;
- (e) amino acids from ~~about~~ 1 to about 197, amino acids about 236 to about 288, and amino acids about 336 to about 373 of SEQ ID NO:2, wherein said amino acids about 197 and about 236 are joined by a peptide bond, and said amino acids about 288 and about 336 are joined by a peptide bond.
- (f) amino acids from ~~about~~ 1 to about 187 of SEQ ID NO:2;
- (g) amino acids from ~~about~~ 2 to about 187 of SEQ ID NO:2; and
- (h) amino acids from ~~about~~ 1 to about 198 of SEQ ID NO:2; wherein said polypeptide is phosphorylated by exposure to ultraviolet irradiation and is recognized by an antibody raised against Nogo B Protein, and wherein said polypeptide has between 1 and 50 conservative amino acid substitutions as compared to the corresponding region of SEQ ID NO:2.

6. (Original) A method of making a recombinant vector comprising inserting a nucleic acid molecule of claim 1 into a vector in operable linkage to a promoter.

7. (Original) A recombinant vector produced by the method of claim 6.

8. (Original) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 7 into said host cell.

9. (Original) A recombinant host cell produced by the method of claim 8.

10. (Original) A recombinant method of producing a polypeptide, comprising culturing the recombinant host cell of claim 9 under conditions such that said polypeptide is expressed and recovering said polypeptide.

Claims 11-22 (Cancelled)

23. (Currently Amended) A method of inhibiting cell growth in vitro, said method comprising transfecting said cell with a polynucleotide, wherein said polynucleotide is between 8 and 50 nucleotides in length and said between 8 and 50 nucleotides are complementary to a mRNA molecule encoding SEQ ID NO:2, wherein said polynucleotide is unique to Nogo B cDNA.

24. (Original) The method of claim 23, wherein said polynucleotide is between about 15 and 25 nucleotides in length.

25. (Original) The method of claim 23, wherein said polynucleotide is selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.

Claims 26-27 (Cancelled)

28. (Currently Amended) A method of inhibiting the activity of Nogo B in a cell in vitro, said method comprising treating said cell with an antisense oligonucleotide wherein said antisense oligonucleotide hybridizes with a polynucleotide encoding Nogo B, wherein said polynucleotide is unique to Nogo B cDNA.

29. (Currently Amended) A method of inhibiting the activity of Nogo B in a cell in vitro, said method comprising treating said cell with a ribozyme capable of cleaving mRNA encoding said Nogo B, wherein said ribozyme cleaves mRNA that is unique to Nogo B cDNA.

30. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 40 conservative amino acid substitutions.

31. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 30 conservative amino acid substitutions.

32. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 25 conservative amino acid substitutions.

33. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 20 conservative amino acid substitutions.

34. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 15 conservative amino acid substitutions.

35. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 10 conservative amino acid substitutions.

36. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 5 conservative amino acid substitutions.

37. (New) The isolated nucleic acid molecule of claim 5, comprising a polynucleotide encoding a polypeptide having not more than 3 conservative amino acid substitutions.